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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,978	08/26/2003	David N. Nelson	6044.102US	6716

7590 06/08/2004  
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EXAMINER
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SALDANO, LISA M

ART UNIT	PAPER NUMBER
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3673

DATE MAILED: 06/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/649,978

Applicant(s)

NELSON, DAVID N.

Examiner

Lisa M. Saldano

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12/29/03 & 2/17/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pink et al (5,535,479) in view of Stockdale et al (5,088,860).

Regarding claim 1, Pink et al disclose a portable blower/vacuum unit 2 for the removal of debris from yards, which may comprise a landscape surface, and driveways (see column 1, lines 39-43). The unit 2 comprises a conduit system with an intake portion comprising vacuum tube 46 and vacuum tube extension 52 (see Fig. 2). The unit also comprises an outlet portion 11 in fluid communication with the intake portion. The outlet portion is attached to a vacuum source comprising a motor 6, drive shaft 8 and fan impeller 10 (see column 4, lines 39-69). As shown in Fig.4, the conduit system is configured to enable the intake portion 46,52 to be held in a downward orientation toward the surface of the landscape with the intake opening disposed at the surface of the landscape. Pink et al disclose that the orientation of the trailing and leading edges of the intake portion may be optimized by varying relative distances of the trailing and leading edges relative to each other. Pink et al also disclose that the optimal distance depends on

the properties of the debris the user desires to pick up; those properties being the debris's size, density and quantity (see column 9, lines 39-47). This disclosure inherently suggests that debris may be collected and removed based on size and density.

Regarding claims 2-6, Pink et al disclose a portable blower/vacuum unit 2 as described above wherein the intake portion 46,52 and the outlet portion exist at a predetermined angle relative to one another (see Fig. 4); the angle is about 90 degrees, which is within the ranges of 75 to 135 degree, as well as within the range of 90 to 105 degrees.

Regarding claim 7, Pink et al disclose a portable blower/vacuum unit 2 as described above wherein the intake portion 46,52 can be lifted vertically with respect to the landscape surface.

Regarding claims 8 and 12, Pink et al disclose a portable blower/vacuum unit 2 as described above wherein the outlet portion 11 includes a conduit having a smaller inner diameter than the inner diameter of the intake portions (see Figs. 2&4).

Regarding claims 9 and 10, Pink et al disclose a portable blower/vacuum unit 2 as described above wherein the intake portion is coupled to a head assembly existing within housing 4 and the outlet portion 11 is formed in one piece with the housing 4 (see Fig.2). The outlet portion 11 comprises an elbow shaped portion at its junction with the housing 4 of the device 2 (see Fig.2).

Regarding claim 11, Pink et al disclose a portable blower/vacuum unit 2 as described above wherein a primary handle 5 is formed in one piece with the head assembly comprising housing 4 (see Fig.2).

However, Pink et al fail to explicitly disclose a pressure state created within the device that retards transmission of landscape rock into the vacuum.

Stockdale et al disclose a process and apparatus 10 for selectively gathering lightweight, low-density objects (see column 1, lines 55-60). Stockdale et al disclose a vacuum system 10 comprising an intake hose 20 and an outlet portion at assembly 21 (see Fig.1). Stockdale et al disclose that the apparatus creates a low-pressure vacuum, which constitutes a pressure state, capable of lifting lightweight low-density materials, such as polystyrene packing material, and leaving heavier items, such as packed items within a packing carton (see abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the portable blower/vacuum unit of Pink et al, which picks up debris based on the debris's size, density and quantity, to incorporate a low pressure vacuum for selectively gathering materials of a certain size and density, as taught by Stockdale et al, because Pink et al clearly disclose that items of various sizes, densities and quantities may be selectively collected by configuring the device to do so. Stockdale et al provide a process and apparatus for use in a vacuum unit for selectively gathering items based on their weight and density. Both inventions provide a method of sorting out the size of debris collected by a vacuum system. Despite varying intended uses of the two inventions, they are both capable of selectively removing material from a space or surface. Furthermore, it would have been obvious to use the system proposed by Stockdale et al because Stockdale et al provide a method that allows modifications to generate the correct amount of vacuum pressure at the inlet portion to pick up debris or material within a particular size range (see column 3, lines 48-60).

Regarding claims 13-16, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the disclosure of the apparatus of Pink et al with the method steps taught by Stockdale et al to derive the basic method steps disclosed by the applicant of the present invention. Although Pink et al fail to explicitly state a method, their disclosure provides basic method steps required to develop a method, particularly in combination with the disclosure of Stockdale et al.

### *Conclusion*

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Schonberg et al (5,741,093), Denton (5,096,337), Sinn (3,294,434), Sander et al (6,640,384) and Conrad et al disclose features that are pertinent to the present application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa M. Saldano whose telephone number is 703-605-1167. The examiner can normally be reached on Monday-Friday, 8:30am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather C. Shackelford can be reached on 703-308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

lms



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